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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/483,883	01/18/2000	Mitsunobu Ono	P/16-251	8978

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EXAMINER

AN, SHAWN S

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 08/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/483,883

Applicant(s)

Mitsunobu Ono et al.

Examiner

Shawn An

Art Unit

2613



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Apr 3, 2000 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

Art Unit: 2613

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al (5,627,583).

Regarding claims 1 and 2, Nakamura et al discloses an endoscope apparatus, comprising:

a solid-state image pickup device (Fig. 2, 11 or 12) mounted at the end of an endoscope;

Art Unit: 2613

a signal processing circuit (Figs. 2 and 4, 16) for driving the image pickup device and for producing a standard video signal in response to an output signal from the image pickup device;

wherein the signal processing circuit comprises a video processing circuit having a drive signal generation function (21) for driving the image pickup device, and a signal processing function (13, 14, or 23), for outputting the standard video signal by processing the output signal from the image pickup device; and

an endoscope function adjusting circuit (Figs. 2 and 4, 16; Fig. 8, 70) comprising a function modifying circuit (24, 25, 26, or 29), connected to the video processing circuit, for modifying at least one of the drive signal processing function (21) and the signal processing function (13, 14, or 23) to perform signal processing compatible with the pickup device.

Regarding claim 3, Nakamura et al discloses an endoscopic function adjusting circuit (Figs. 2 and 4, 16), connected to a video processing circuit, for driving a solid-state image pickup device (21), and a signal processing function (13, 14, or 23), for outputting a standard video signal by processing an output signal of the image pickup device (Fig. 2, 11 or 12), wherein the endoscopic function adjusting circuit, comprises:

a function modifying circuit (24, 25, 26, or 29) for modifying at least one of the drive signal processing function (21) and the signal processing function (13, 14, or 23) executed by the video processing signal in accordance with the endoscope having the solid-state image pickup device.

Regarding claim 4, Nakamura et al discloses a delay amount adjusting circuit (Fig. 8, 91) for preventing signal delay taking place in a signal cable connecting the image pickup device and the signal processing circuit.

Regarding claim 5, Nakamura et al discloses endoscope being detachably connected to a light source (Fig. 4, 34), and the function adjusting circuit comprising at least a white balance adjusting circuit (24) for setting a white balance in view of the wavelength distribution of light emitted by a lamp built in the light source.

Art Unit: 2613

Regarding claim 6, Nakamura et al discloses the endoscopic function adjusting circuit (Fig. 2, 16) comprising an adjusting circuit (col. 7, lines 35-43; note: optimum processing circuit) accommodating a variation (change) in the number of pixels, for producing the standard signal, even when the number of pixels in the image pick up device (11 or 12) is changed (col. 3, lines 30-56).

Regarding claim 10, Nakamura et al discloses the video processing circuit (Fig. 2, 13-14) and the endoscopic function adjusting circuit (Fig. 2, 16) remaining unchanged from the respective circuits thereof when the number of pixels in the image pick up device (11 or 12) becomes different (col. 3, lines 30-56).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al (5,627,583) in view of Sato et al (4,646,724).

Regarding claim 7, Nakamura et al does not specifically disclose the function adjusting circuit having the function of outputting a video signal of a still image.

However, Sato et al teaches an endoscope (Fig. 2) including a well known function of outputting a video signal of a still image (col. 1, lines 57-62) for recording for later diagnosis or analysis.

Art Unit: 2613

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing an endoscope apparatus as taught by Nakamura et al to incorporate the Sato et al's function of outputting a video signal of a still image for recording for later analysis or diagnosis.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al (5,627,583) in view of Takayama (4,559,928).

Regarding claim 8, Nakamura et al does not specifically disclose the function adjusting circuit having the motorized function of flexing a bending portion of the insert section.

However, Takayama teaches an endoscope (Fig. 1) including a well known function of flexing a bending portion of the insert section by a motor (col. 2, lines 12-17) to effectively adjust the bending operation of the insertion section.

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing an endoscope apparatus as taught by Nakamura et al to incorporate the Takayama's function of flexing a bending portion of the insert section by a motor in the Nakamura's function adjusting circuit in order to effectively adjust the bending operation of the insertion section for flexibility and easy maneuverability.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al (5,627,583) in view of Wood et al (4,941,456).

Regarding claim 9, Nakamura et al does not specifically disclose the video processing circuit and the function adjusting circuit remaining unchanged from the respective circuit arrangements thereof when the length of the insertion section becomes different.


However, Wood et al teaches an endoscope (Fig. 7) including a video processor remaining unchanged from the respective circuit arrangements thereof when the length of the insertion section becomes different (col. 6, lines 31-35) in order to accurately utilize a plurality of different length of the respective insertion tubes.

Art Unit: 2613

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing an endoscope apparatus as taught by Nakamura et al to incorporate the wood et al's teaching so that the Nakamura's video processing circuit and the function adjusting circuit remains unchanged from the respective circuit arrangements thereof when the length of the insertion section becomes different in order to accurately utilize a plurality of different length of the respective insertion tubes.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.
- A) Yabe et al (4,845,555), Electronic endoscope apparatus.
 - B) Nakamura et al (5,614,943), Dissimilar endoscopes usable with a common control unit.
 - C) Parulski et al (5,040,068), Electronic imaging apparatus with interchangeable pickup units.
 - D) Miller et al (6,100,920), Video signal compensator for compensating differential picture brightness of an optical image due to uneven illumination and method.
10. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number (703) 305-0099 and schedule are Tuesday-Friday (Monday off).

SSA 
August 22, 2002

**SHAWN S. AN
PATENT EXAMINER**